

Device and method for determining tone ringing frequency

ABSTRACT

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The invention provides a method for determining tone ringing frequency, with the following steps: forming a ZC signal from a tone ringing signal by comparing the tone ringing signal with a threshold (S), the ZC signal having a succession of alternately rising and falling edges between two ZC signal values; measuring the respective time duration between the adjacent rising and falling edges of the ZC signal; comparing the measured time durations with a predetermined time duration limit value (t_g); defining an evaluation start time (t_1) if a measured time duration is greater than or equal to the time duration limit value (t_g), the evaluation start time (t_1) being the instant of the subsequent edge; defining an evaluation stop time (t_2) if a measured time duration with an identical ZC signal value to the next-but-one instance is greater than or equal to the time duration limit value (t_g), the evaluation stop time (t_2) being the instant of the subsequent edge; and determining the frequency (f) on the basis of the measured time difference between the evaluation start time (t_1) and the evaluation stop time (t_2).

(Figure 1)